

Install SCCM Current Branch 1606 on Remote SQL Step By Step

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1 Overview For Deployment Plan

In this Guide we will Go Step by Step for installation SCCM 1606 on Remote SQL Server, let's Go with the below plan for our Deployment:

1. Create Two Domain Accounts as Service Account, one as a domain admin for SCCM and the other for SQL Services (Domain user)
2. Create System Management Container and Give the Computer Account for site server the needed permissions
3. Extend AD Schema
4. Install ADK
5. Install the Required Roles and Features For SCCM
6. Install SQL Server on Remote virtual machine
7. Configure Static Port for SQL and Add SCCM Site Server As local Admin on SQL Server
8. Install SCCM primary server Stand-alone

2 Deployment Steps

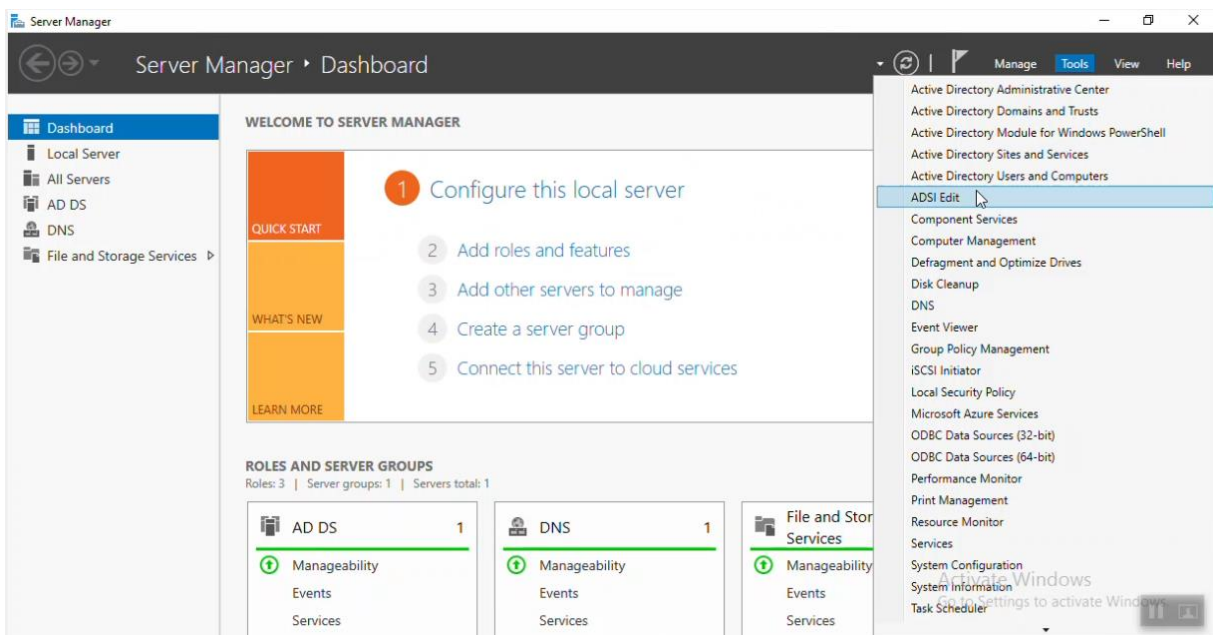
2.1 Create Service Accounts

In This Step you need to Create one Service account (normal Domain user) for running SQL Services as the installation will fail if you use local system account for running SQL Services. And the other account for SCCM (domain admin) as SCCM need these accounts to be local admin on all machines

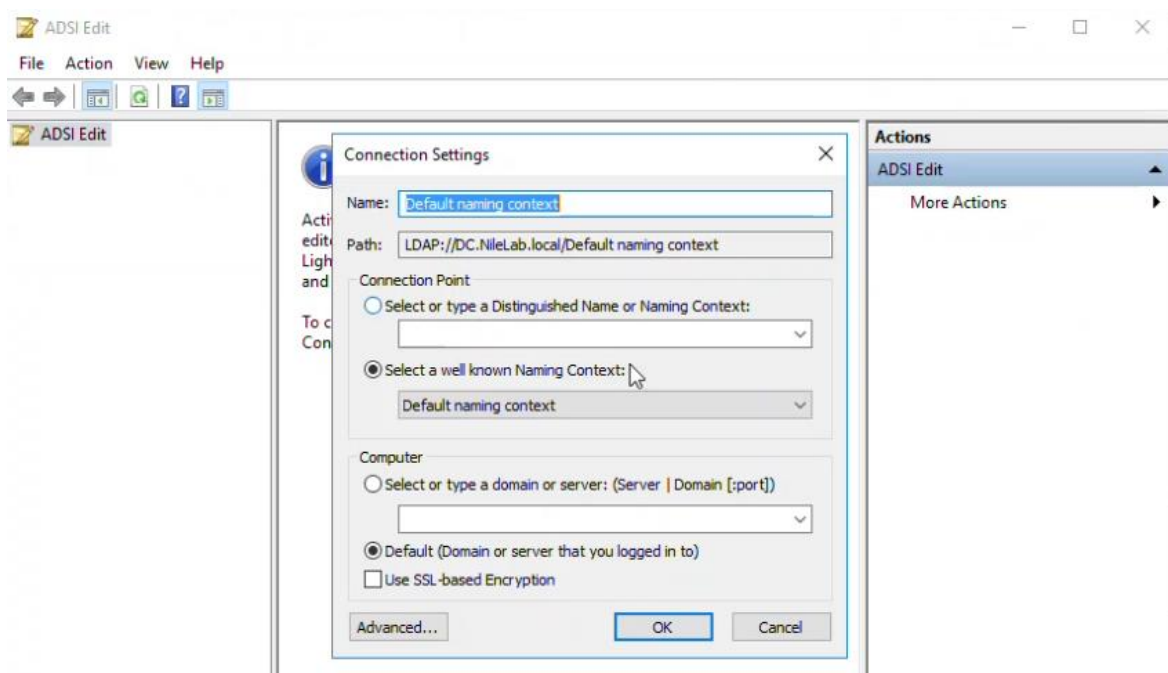
2.2 Create System Management Container

We Will Create System Management Container which SCCM used for Publishing its information on Active Directory

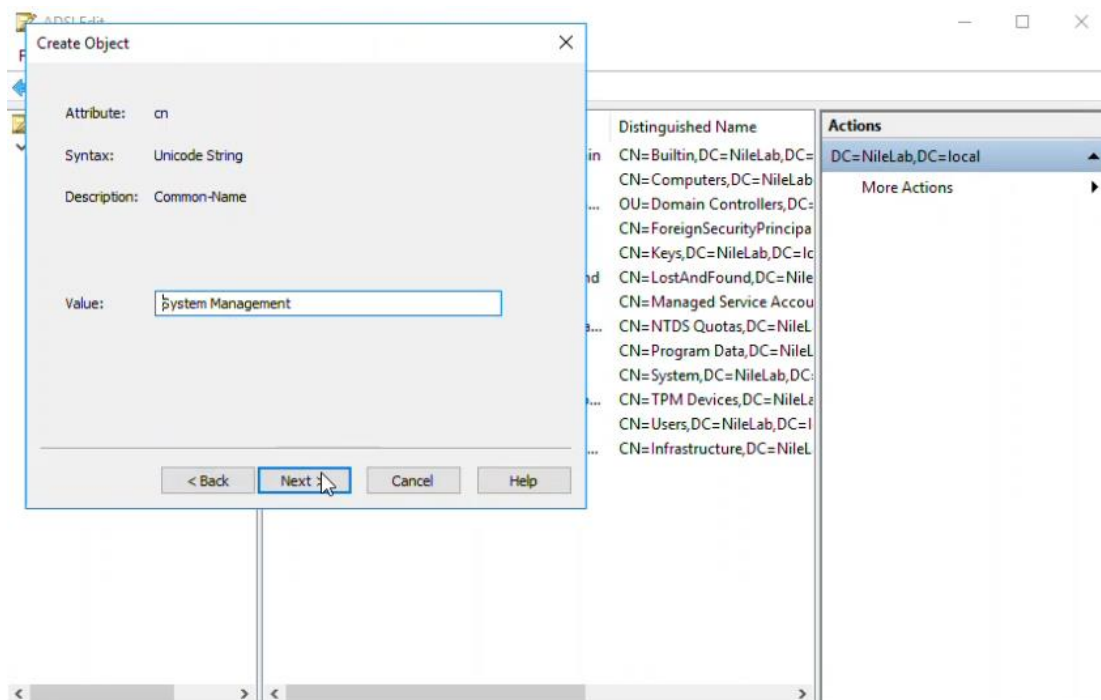
1. To create a container log on to the Domain controller with administrator account, click on **Server Manager, Tools**, click on **ADSI Edit**.



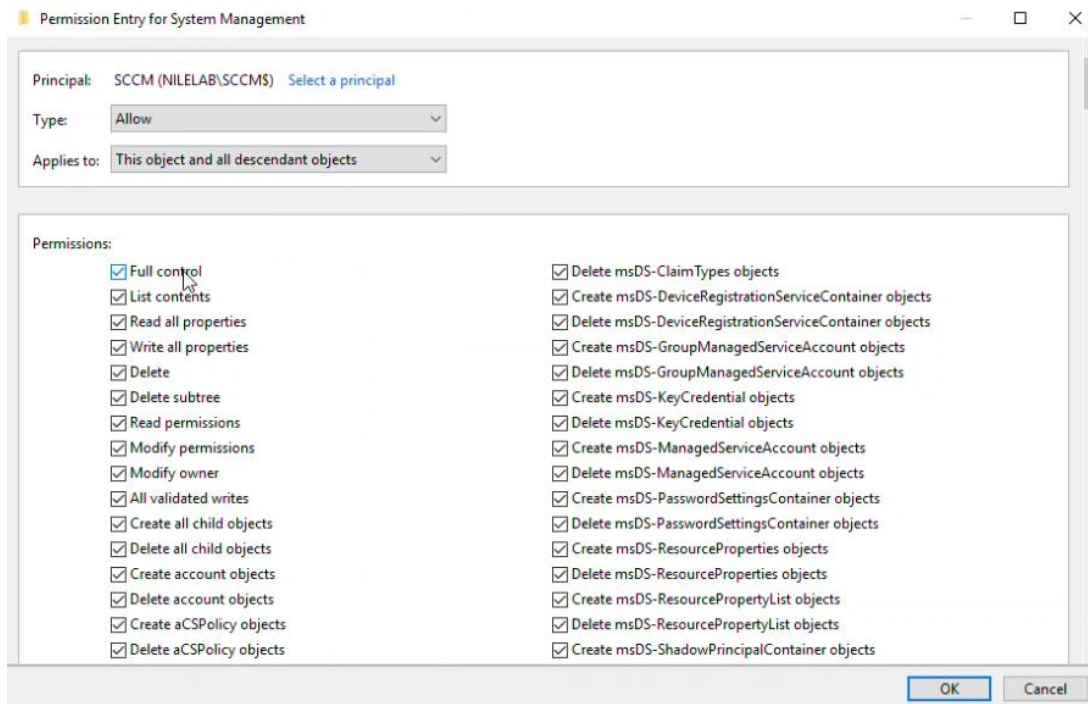
- Right click **ADSI Edit** and click on **Connect to**. On the **Connection Settings** window, the naming context should be **Default naming context**. Do not change anything here, click on **OK**.



- In the **ADSI Edit** Console, expand the **Default Naming Context**, right click **CN=System**, click on **New**, create an **Object**, Select **Container**, Provide the value as **System Management**, Click on **Next** and click on **Finish** to close the wizard.

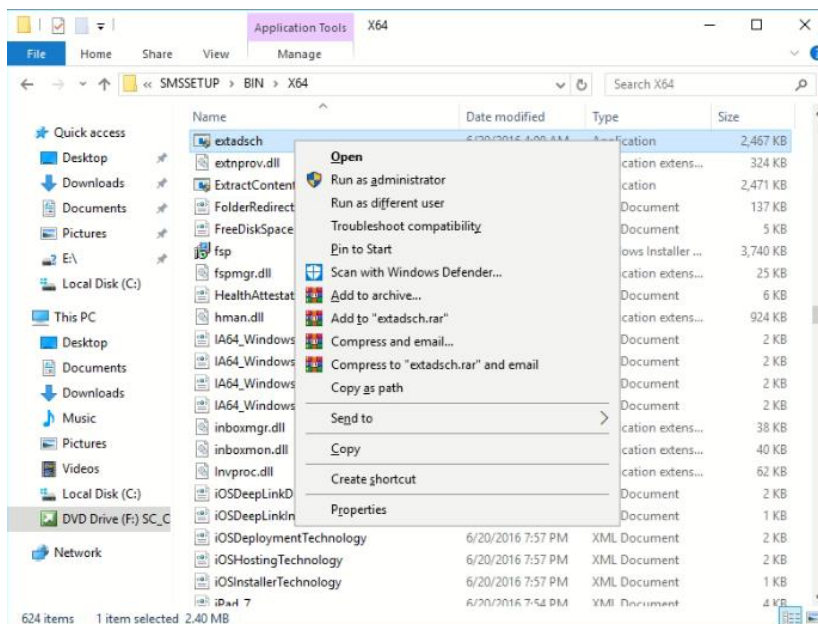


- Right Click On **System Management** Container, Click **Properties**, Click On **Security Tab**, Click **Add**, browse for **SCCM Site Server Computer Account**, Click **ok**, Click on **Advanced**, Select the **SCCM Computer Account**, Click **Edit**, Select **Full Control** and in Applies to Select **This Object and all descendant objects**



2.3 Extend AD Schema

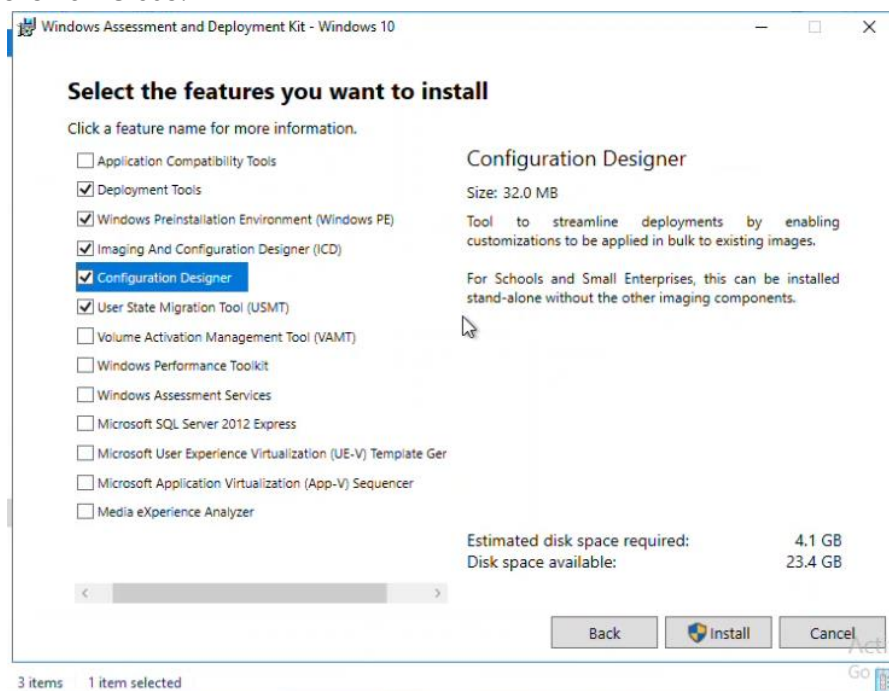
- Log on Your **DC** To extend the Active Directory Schema using extadsch.exe utility, locate the **extadsch.exe** which can be found in **SMSSETUP\BIN\X64** of the configuration manager setup DVD, Hold the **shift** key on your keyboard and right click **extadsch.exe** and click on **Copy as Path**.



2. Launch the **command prompt**. Right click and click paste and hit enter. You should see the line **Successfully extended the Active Directory Schema**.

2.4 Install ADK

1. Download the **adksetup.exe**, right click on the file and click on **Run as Administrator**. On the **Specify Location** page, choose the install path. Click on **Next**. Select the following features to install **Deployment Tools**, **Windows Preinstallation Environment**, **Imaging and Configuration Designer**, **Configuration Designer** and **User State Migration Tool**. Click on **Install**. Once the features are installed click on **Close**.



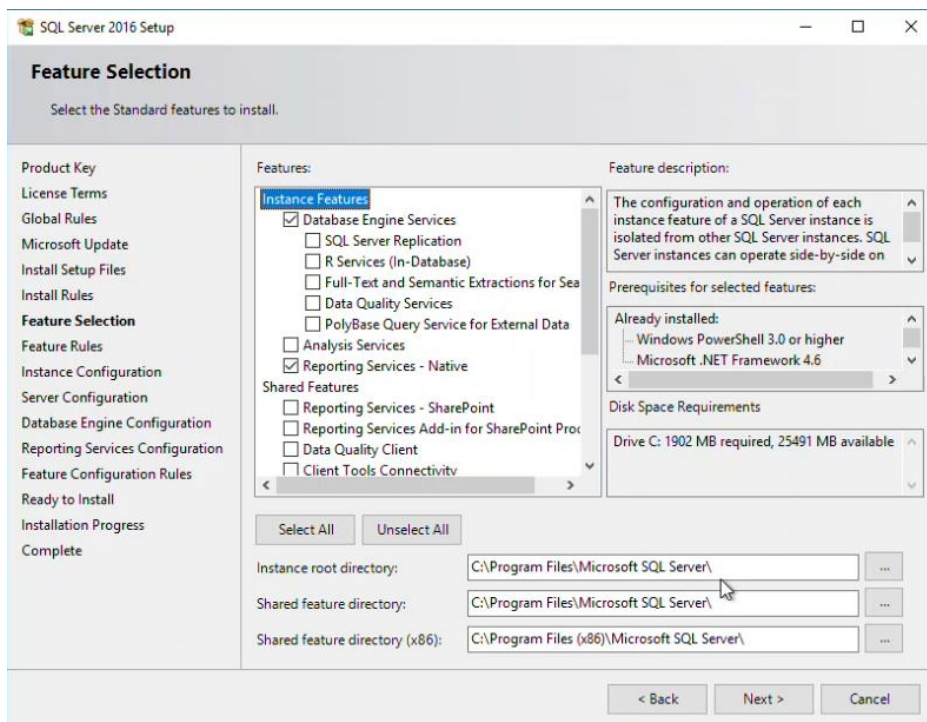
2.5 Install Required Roles And Features

1. On the SCCM server, click on **Server Manager**, click on **Manage**, click on **Add Roles and Features**. Select **Web Server (IIS)** as the server role and click on **Next**.
2. **.Net Framework 3.5 Features [Install all sub features]**
3. **.Net Framework 4.5 Features [Install all sub features]**
4. **BITS**
5. **Remote Differential Compression**
6. Install the following Roles Services
7. **Common HTTP Features – Default Document, Static Content.**
8. **Application Development – ASP.NET 3.5, .NET Extensibility 3.5, ASP.NET 4.5, .NET Extensibility 4.5, ISAPI extensions.**
9. **Security – Windows Authentication.**
10. **IIS 6 Management Compatibility – IIS Management Console, IIS 6 Metabase Compatibility, IIS 6 WMI Compatibility, IIS Management Scripts and Tools.**

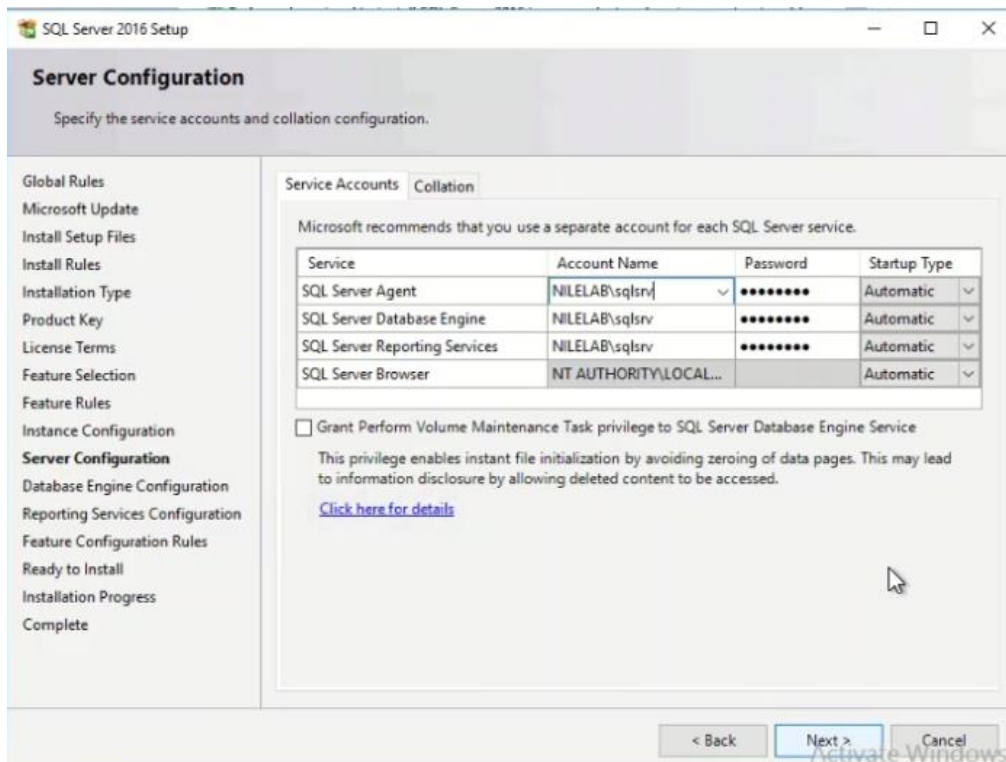
2.6 Install SQL Server on Remote virtual machine

1. Open the SQL server folder, run the setup as **administrator**. Click on **Installation** and click on **New SQL server standalone installation**. Check the box for **I accept the license terms** and click on **Next**. After the Setup Support Rules are completed click on **Next**. Select the **Setup Role as SQL Server Feature Installation** and click **Next**.

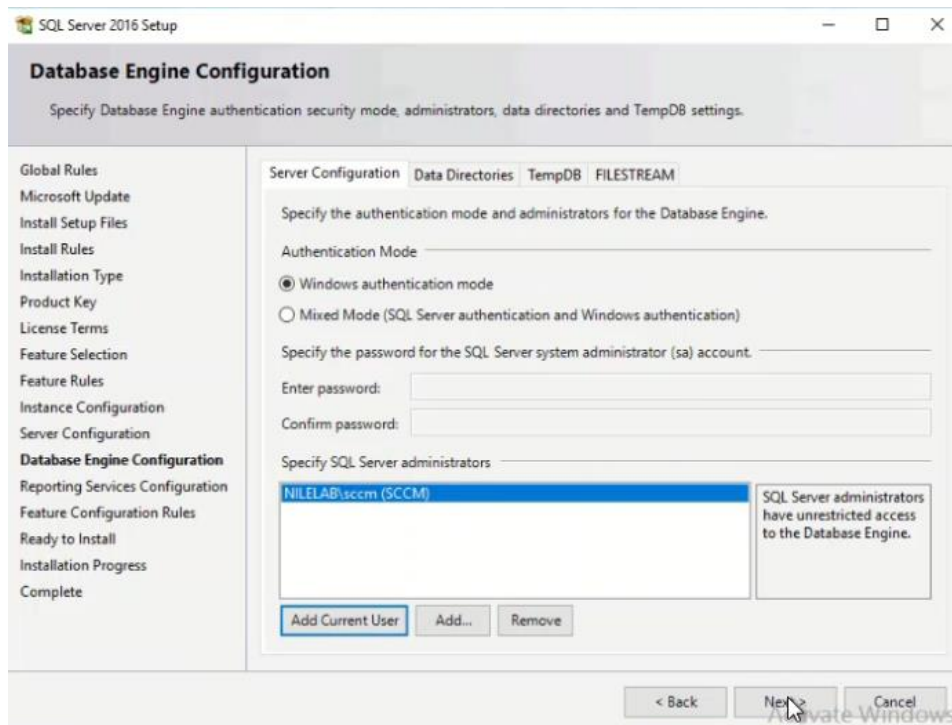
- On the **Feature Selection** window, select **Database Engine Services** and **Reporting Services-Native**



- the collation should be **SQL_Latin1_General_CP1_CI_AS**
- Add SQL service account, The logon account for the SQL Server service cannot be a local user account, NT SERVICE\<sql service name> or LOCAL SERVICE. You must configure the SQL Server service to use a valid domain account, NETWORK SERVICE, or LOCAL SYSTEM



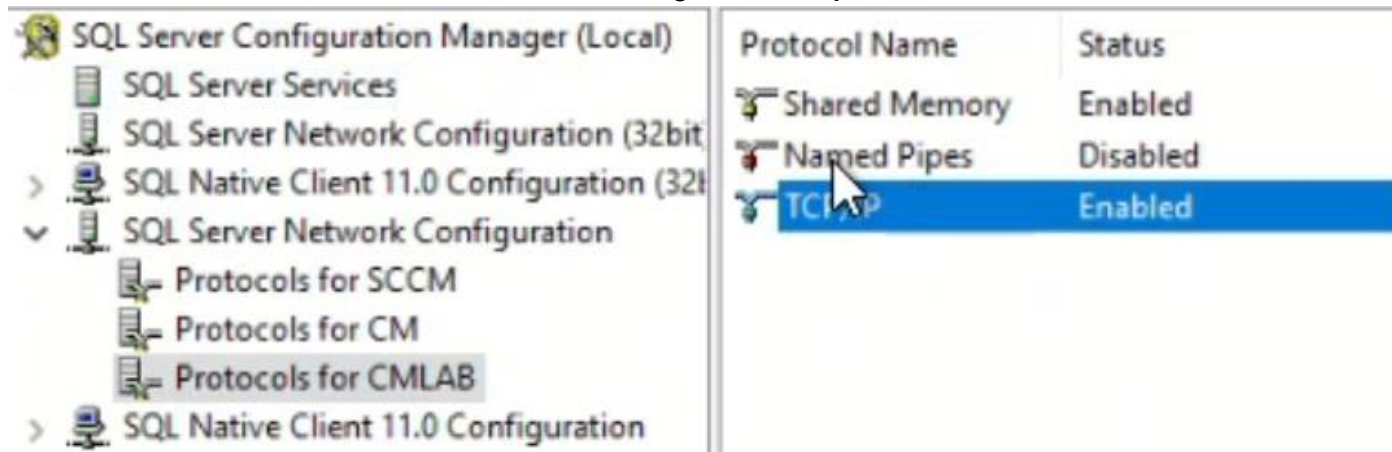
5. Add the account which will be used for setup the SCCM, Click **Next**, Click **on Install and Configure**, Click **Next** and Click **Install**



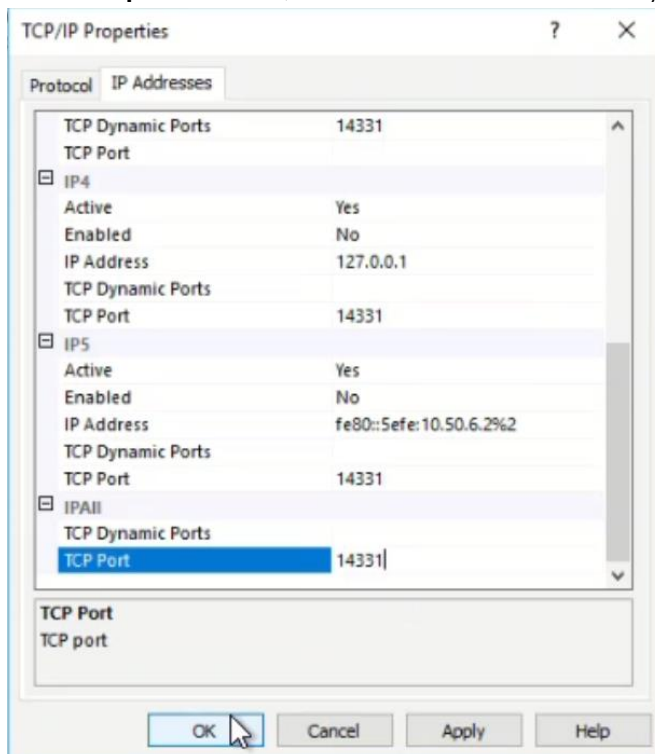
2.7 Configure Static Port for SQL and Add SCCM Site Server As local Admin on SQL Server

The instance name that you use for the site must be configured to be configured with a static tcp port. Dynamic ports are not supported

1. Open **SQL Server Configuration Manager**, Click on **SQL Server Networker Configuration**, Select Protocols for **the SCCM Instance**, Click On **TCP/IP**, Right Click **Properties**



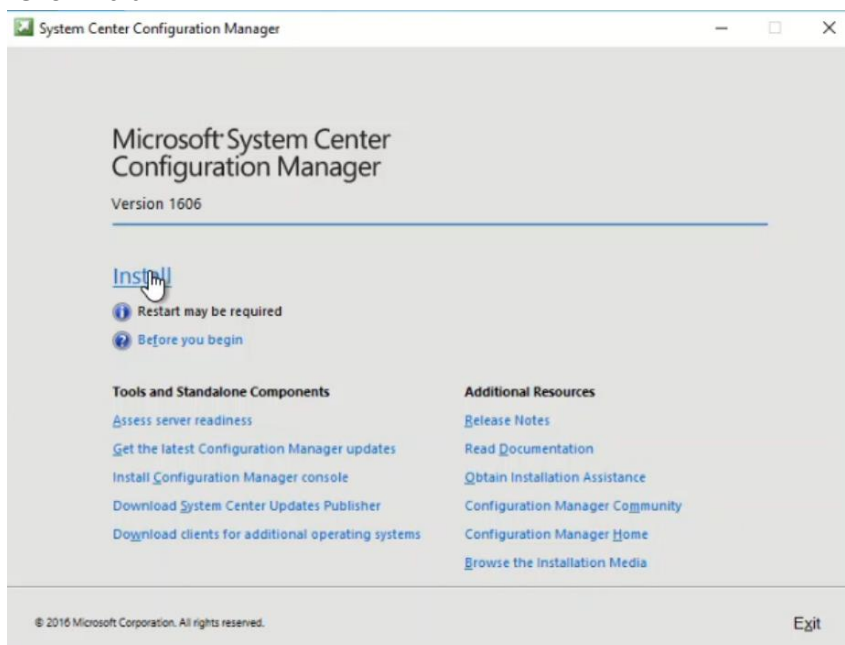
2. Click on **Ip Addresses**, Remove Value **0** From every **TCP Dynamic Ports**, and Set **any TCP Port**



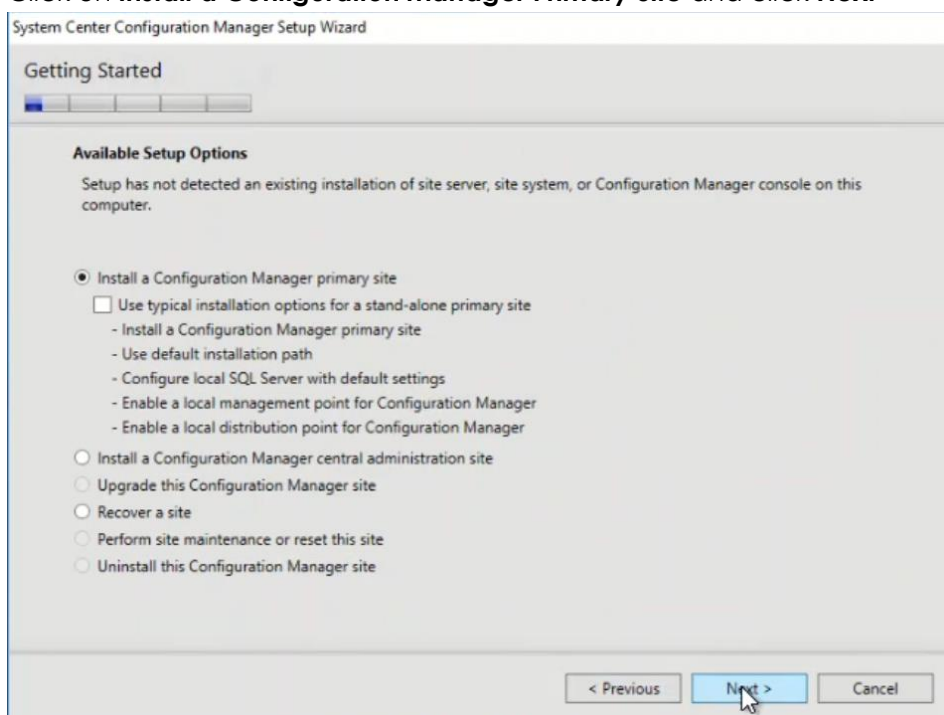
3. Restart SQL Server Service for the SCCM Instance
4. Add SCCM Site Server Computer Account To local Admin on SQL Server

2.8 Install SCCM primary server Stand-alone

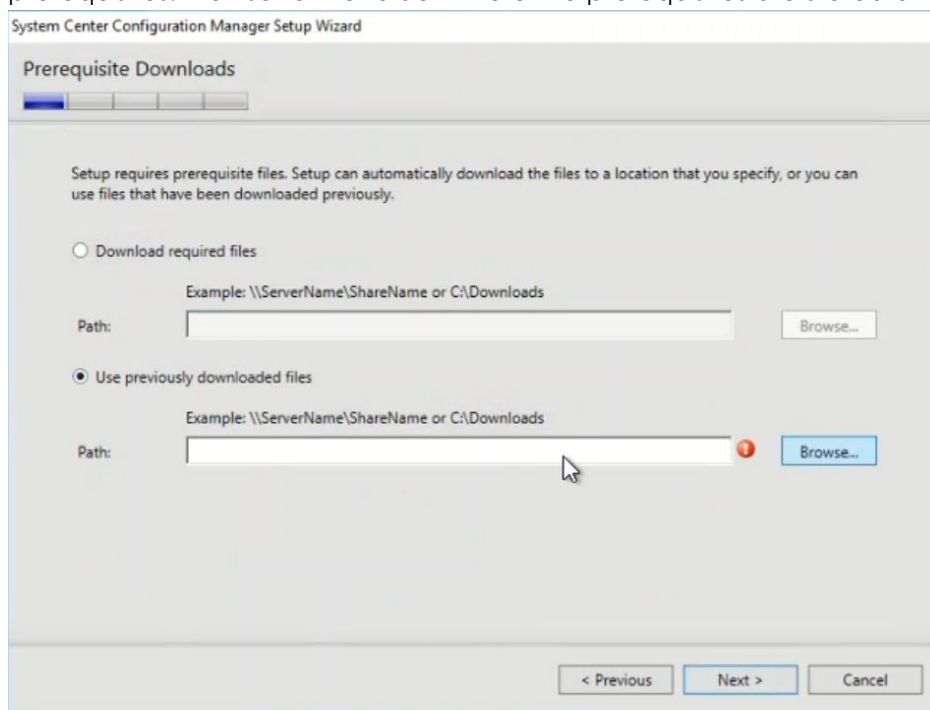
1. Click **Install**



2. Click on **Install a Configuration Manager Primary Site** and click **Next**



3. Enter the product key if you have it or else choose **Install the evaluation edition** and click on **Next**.
4. Accept the license terms for **Microsoft SQL Server 2012 Express**, **SQL 2012 Native Client** and **Silverlight 5** and click on **Next**.
5. Prerequisite Downloads – There are 2 options that we see here.
 - a. Download required files – Select this option to download the setup prerequisites from Microsoft and you can store them in a folder or shared path.
 - b. Use previously downloaded files – Select this option if you have downloaded the prerequisites. Browse to the folder where the prerequisites are stored and click on Next.



6. Specify a **Site Code**, **Site name** and check the box **Install the Configuration Manager Console**. Click on **Next**.

System Center Configuration Manager Setup Wizard

Site and Installation Settings

Specify a site code that uniquely identifies this Configuration Manager site in your hierarchy.

Site code:

Specify a site name that helps to identify the site. Example: Contoso Headquarters Site

Site name:

Note: The site code must be unique in the Configuration Manager hierarchy and cannot be changed after you install the site.

Installation folder:

Specify whether to install the Configuration Manager console to manage the Configuration Manager site from this computer. You can remotely manage the site when you do not install the Configuration Manager console.

☒ Install the Configuration Manager console

< Previous Cancel

7. If you plan to join this primary site to CAS then choose **Join the primary site to an existing hierarchy**, you must provide the CAS server FQDN to join the hierarchy. If you plan to build hierarchy with more than one primary site, you must install CAS first. Else if you are installing primary site as a standalone site then choose the second option. Click **Yes** on the message box and click on **Next**.

System Center Configuration Manager Setup Wizard

Primary Site Installation

Specify whether to join the primary site to an existing Configuration Manager hierarchy or install the primary site as a stand-alone site.

☐ Join the primary site to an existing hierarchy

Central administration site server (FQDN): Example: server1.contoso.com

☒ Install the primary site as a stand-alone site

< Previous Cancel

8. Specify **SQL Server Name, Instance name** and Click **Next**

System Center Configuration Manager Setup Wizard

Database Information

Configuration Manager primary sites require a Microsoft SQL Server database to store site settings and data.

Specify the site database server details. The instance name that you use for the site database must be configured with a static TCP port. Dynamic ports are not supported.

SQL Server name (FQDN): Example: Server1.contoso.com

Instance name (leave blank for default): Example: MyInstance

Database name: Example: CM_XYZ

Specify the TCP port number for SQL Server Service Broker. Configuration Manager uses Service Broker to replicate data between parent and child site database servers in the hierarchy. This port is different from the port used by the SQL Server service, which is automatically detected by Configuration Manager.

Service Broker Port:

< Previous Next > Cancel

9. Specify the locations

System Center Configuration Manager Setup Wizard

Database Information

Specify the locations for the SQL Server data file and transaction log file.

Path to the SQL Server data file

Path to the SQL Server log file

< Previous Next > Cancel

10. We Will use HTTP

System Center Configuration Manager Setup Wizard

Client Computer Communication Settings

Configuration Manager site system roles can accept HTTP or HTTPS communication from clients. Specify whether to require all site system roles to accept only HTTPS communication or allow the communication method to be configured on each site system role.

☐ All site system roles accept only HTTPS communication from clients

☒ Configure the communication method on each site system role

☐ Clients will use HTTPS when they have a valid PKI certificate and HTTPS-enabled site roles are available

Note: HTTPS communication requires client computers to have a valid PKI certificate for client authentication.

< Previous Next > Cancel

11. Install Management and Distribution Points

System Center Configuration Manager Setup Wizard

Site System Roles

Specify whether to have Setup install a management point or distribution point.

A management point provides clients with policy and content location information. It also receives configuration data from clients.

☒ Install a management point.

FQDN: Client connection:

A distribution point contains source files for clients to download and lets you control content distribution by using bandwidth, throttling, and scheduling controls.

☒ Install a distribution point.

FQDN: Client connection:

The site server's computer account is used to install the selected site system roles. Ensure that this account is a member of the local administrators group for the specified servers.

You can install additional site system roles from the Configuration Manager console after Setup finishes.

Site system roles configured to use HTTPS must have a valid PKI server certificate.

< Previous Next > Cancel

12. Let's Begin Install :)

